UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
MA, JOHNNY

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)	
Office Action Summary		09/451,870	ITO ET AL.	
		Examiner	Art Unit	
		Johnny Ma	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 October 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-14,16-19 and 21-96</u> is/are pending in the application.

    4a) Of the above claim(s) <u>1-11 and 23-96</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>12-14,17-19 and 22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>8/19/04</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 10/8/2004 have been fully considered but they are not

persuasive.

Applicant argues that neither Suzuki nor Rajan teaches or suggests receiving image data

encoded by MPEG-4, as well as image data and/or sound data encoded by another coding

format. However, the examiner respectfully disagrees. As discussed in the previous Office

Action, the Suzuki reference discloses receiving image data encoded by MPEG-4 where

demultiplexer circuit 205, syntax analysis circuit 206/208 and decoders as illustrated in Figure 1,

wherein description is made assuming the MPEG4 scheme is employed for an encoding and

decoding scheme (column 13, lines 62-67). The Suzuki reference also discloses receiving image

data and/or sound data encoded by another coding formation where "[e]ach of the decoders 207-

1 to 207-n decodes an associated bitstream based on a predetermined decoding method

corresponding to the encoding, and outputs a video or audio signal to the reconstruction circuit

209 (column 16, lines 21-24) and "[t]he syntax analysis circuit 206 identifies the type and the

number of required decoders to supply required decoders 207-1 to 207-n with the respective

bitstreams ES1-Esn (column 16, lines 3-6) wherein the format of the bitstream may be MPEG2

video or the like (column 20, lines 43-50). Receiving such data is inherent to the decoding

process. Also note that MPEG-4 comprises a plurality of objects wherein the Suzuki reference

discloses MPEG-2 as one of the plurality of objects.

As to applicant's assertion that "the cited patents do not teach or suggest that both and

MPEG 4 stream and an MPEG 2 stream are received, decoded, set in a layout, and synthesized as

recited in the independent claims." Please see the rejection of claim 12, 17, and 22 as discussed

below.

As to applicants assertion that "the cited patents do not teach or suggest a layout of the

images in accordance with coding formats of the received image data," arguing against the

references individually. The examiner respectfully submits that one cannot show

nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re*

Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As discussed below, the Suzuki

and Rajan combination teaches a user specified layout of the images wherein objects may be

encoded in various formats requiring different decoding processes. Therefore, the layout of

images is in accordance with the coding formats of the received image data wherein such coding

formats are decoded by their respective decoders before setting and synthesizing.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.   Claims 12-15, 17-19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Suzuki et al. (US 6,567,427 B1) in further view of Rajan (US 2001/0000962 A1).

As to claim 12, note the Suzuki et al. reference discloses an image signal multiplexing

apparatus and methods, image signal demultiplexing apparatus and methods, and transmission

media. The claimed "a first decoder, arranged to decode the image data encoded by MPEG 4" is

met by demultiplexer circuit 205, syntax analysis circuit 206/208 and decoders as illustrated in

Figure 1, wherein description is made assuming the MPEG4 scheme is employed for an

encoding and decoding scheme (column 13, lines 62-67). The claimed "a second decoder,

arranged to decode the image data and/or sound data encoded by the other coding scheme" is met

by "[e]ach of the decoders 207-1 to 207-n decodes an associated bitstream based on a

predetermined decoding method corresponding to the encoding, and outputs a video or audio

signal to the reconstruction circuit 209 (column 16, lines 21-24) and "[t]he syntax analysis circuit

206 identifies the type and the number of required decoders to supply required decoders 207-1 to

207-n with the respective bitstreams ES1-Esn (column 16, lines 3-6) wherein the format of the

bitstream may be MPEG2 video or the like (column 20, lines 43-50). The claimed "a receiver,

arranged to receive image data encoded by MPEG 4, and image data and/or sound data encoded

by another coding format" is met by the decoding of MPEG 4 and MPEG 2 data as discussed

above wherein it is inherent that such data be received for decoding.

However, the Suzuki reference is silent as to the use of a setter. Now note the Rajan

reference discloses a terminal for composing and presenting MPEG-4 video programs wherein

"...the scene description information is coded into a binary format known as BIFS (Binary

Format for Scene). This BIFS data is packetized and multiplexed at a transmission site, such as a

cable and or satellite television headend, or a server in a computer network, before being sent

over a communication channel to a terminal 100" (Rajan [0042]). The claimed "setter, arranged

to set a layout of images represented by a plurality of image data, which are decoded by said first

and second decoders" is met by "[t]he terminal manager 110 passes the user input events to the

composition engine 120 for appropriate handling. For example, a user may enter commands to reposition or change the attributes of certain objects within the scene graph" (Rajan [0068]) wherein the composition engine maintains and updates a scene graph of the current objects for display (Rajan [0078]) including a scene graph for reproduction of objects for display (Rajan [0078]). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify (if necessary) the Suzuki et al. MPEG 4 presentation with the Rajan setter for the purpose of allowing a user to customize display of programming and user interactivity with such programming wherein the MPEG-4 communication standard allows a user to interact with video and audio objects within a scene, whether they are from conventional sources, such as moving video, or from synthetic (computer generated) sources (Rajan [0004]). The claimed "in accordance with the coding formats of the received image and/or sound data" is met by the Suzuki and Rajan combination wherein objects may be encoded in various formats requiring different decoding means as set forth above.

The claimed "a synthesizer, arranged to synthesize the plurality of image data and/or sound data decoded by said first and second decoders in accordance with the layout" is met by "reconstruction circuit 209 includes a synthesizer circuit 252 such that an image signal produced by the synthesizer circuit 252 is supplied to a display 251 for display (column 16, lines 42-50) wherein elementary streams comprise encoded audio and video streams (column 13, lines 56-59) and the Suzuki and Rajan combination where images are synthesized in accordance with user specified layouts..

As to claim 13, the claimed "wherein said second decoder decodes image data and/or

sound data encoded by MPEG 2," please see rejection of claim1 wherein the format of the

bitstream may be MPEG2 video or the like (column 20, lines 43-50).

As to claim 14, the claimed "further comprising a reproducer arranged to reproduce the

image data and/or sound data synthesized by said synthesizer" is met by "reconstruction circuit

209 includes a synthesizer circuit 252 such that an image signal produced by the synthesizer

circuit 252 is supplied to a display 251 for display (column 16, lines 42-50) wherein elementary

streams comprise encoded audio and video streams (column 13, lines 56-59).

As to claim 16, the claimed "further comprising a memory for storing the layout set by

said setter" is met by that discussed in the rejection of claim 12 wherein user modifies a scene

graph that is maintained on a terminal for presentation of programming, the storing in memory of

such information is inherent to the maintaining of the scene graph for composition purposes.

The claimed "in correspondence with information related to a broadcast program received by

said receiver" is also met by that discussed in the rejection of claim 12 wherein the stored scene

graph information corresponds to broadcasted video programming as evidenced by program

transmission from a cable and or satellite television headend (Rajan [0042]).

As to claim 17, note the Suzuki et al. reference discloses an image signal multiplexing

apparatus and methods, image signal demultiplexing apparatus and methods, and transmission

media. The claimed "decoding the image data encoded by MPEG 4" is met by demultiplexer

circuit 205, syntax analysis circuit 206/208 and decoders as illustrated in Figure 1, wherein

description is made assuming the MPEG4 scheme is employed for an encoding and decoding

scheme (column 13, lines 62-67). The claimed "decoding the image data and/or sound data

encoded by the other coding format" is met by "[e]ach of the decoders 207-1 to 207-n decodes

an associated bitstream based on a predetermined decoding method corresponding to the

encoding, and outputs a video or audio signal to the reconstruction circuit 209 (column 16, lines

21-24) and "[t]he syntax analysis circuit 206 identifies the type and the number of required

decoders to supply required decoders 207-1 to 207-n with the respective bitstreams ES1-Esn

(column 16, lines 3-6) wherein the format of the bitstream may be MPEG2 video or the like

(column 20, lines 43-50). The claimed "receiving image data encoded by MPEG 4, and image

data and/or sound data encoded by another coding format" is met by the decoding of MPEG 4

and MPEG 2 data as discussed above wherein it is inherent that such data be received for

decoding.

However, the Suzuki reference is silent as to the use of a setter. Now note the Rajan

reference discloses a terminal for composing and presenting MPEG-4 video programs wherein

"...the scene description information is coded into a binary format known as BIFS (Binary

Format for Scene). This BIFS data is packetized and multiplexed at a transmission site, such as a

cable and or satellite television headend, or a server in a computer network, before being sent

over a communication channel to a terminal 100" (Rajan [0042]). The claimed "setting a layout

of images represented by a plurality of image data, which are decided in said decoding steps" is

met by "[t]he terminal manager 110 passes the user input events to the composition engine 120

for appropriate handling. For example, a user may enter commands to reposition or change the

attributes of certain objects within the scene graph" (Rajan [0068]) wherein the composition

engine maintains and updates a scene graph of the current objects for display (Rajan [0078])

including a scene graph for reproduction of objects for display (Rajan [0078]). Therefore, the

examiner submits that it would have been obvious to one of ordinary skill in the art at the time

the invention was made to modify (if necessary) the Suzuki et al. MPEG 4 presentation with the

Rajan setter for the purpose of allowing a user to customize display of programming and user

interactivity with such programming wherein the MPEG-4 communication standard allows a

user to interact with video and audio objects within a scene, whether they are from conventional

sources, such as moving video, or from synthetic (computer generated) sources (Rajan [0004]).

The claimed "in accordance with the coding formats of the received image and/or sound data" is

met by the Suzuki and Rajan combination wherein objects may be encoded in various formats

requiring different decoding means as set forth above.

The claimed "synthesizing the plurality of decoded image data and/or sound data decoded

in said decoding steps" is met by "reconstruction circuit 209 includes a synthesizer circuit 252

such that an image signal produced by the synthesizer circuit 252 is supplied to a display 251 for

display (column 16, lines 42-50) wherein elementary streams comprise encoded audio and video

streams (column 13, lines 56-59). The claimed "decoded in said decoding steps, in accordance

with the layout" is met by the Suzuki and Rajan combination where images are synthesized in

accordance with user specified layouts..

As to claim 18, the claimed "wherein the other coding format is MPEG 2," please see

rejection of claim 17 wherein the format of the bitstream may be MPEG2 video or the like

(column 20, lines 43-50).

As to claim 19, the claimed "further comprising the step of reproducing the image data

and/or sound data synthesized in said synthesizing step" is met by "reconstruction circuit 209

includes a synthesizer circuit 252 such that an image signal produced by the synthesizer circuit

252 is supplied to a display 251 for display (column 16, lines 42-50) wherein elementary streams

comprise encoded audio and video streams (column 13, lines 56-59).

As to claim 21, the claimed "further comprising the step of storing the layout set in the

setting step in said setting step in memory" is met by that discussed in the rejection of claim 17

wherein user modifies a scene graph that is maintained on a terminal for presentation of

programming, the storing in memory of such information is inherent to the maintaining of the

scene graph for composition purposes. The claimed "in correspondence with information related

to a broadcast program received in said receiving step" is also met by that discussed in the

rejection of claim 17 wherein the stored scene graph information corresponds to broadcasted

video programming as evidenced by program transmission from a cable and or satellite

television headend (Rajan [0042]).

As to claim 22, note the Suzuki et al. reference discloses an image signal multiplexing

apparatus and methods, image signal demultiplexing apparatus and methods, and transmission

media wherein the disclosed processing may be implemented in software or hardware (column

22, lines 15-24). The claimed "decoding image data encoded by MPEG 4" is met by

demultiplexer circuit 205, syntax analysis circuit 206/208 and decoders as illustrated in Figure 1,

wherein description is made assuming the MPEG4 scheme is employed for an encoding and

decoding scheme (column 13, lines 62-67). The claimed "decoding the image data and/or sound

data encoded by the other coding format" is met by "[e]ach of the decoders 207-1 to 207-n

decodes an associated bitstream based on a predetermined decoding method corresponding to the

encoding, and outputs a video or audio signal to the reconstruction circuit 209 (column 16, lines

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(column 16, lines 3-6) wherein the format of the bitstream may be MPEG2 video or the like

(column 20, lines 43-50). The claimed "receiving image data encoded by MPEG 4, and image

data and/or sound data encoded by another coding format" is met by the decoding of MPEG 4

and MPEG 2 data as discussed above wherein it is inherent that such data be received for

decoding.

However, the Suzuki reference is silent as to the use of a setter. Now note the Rajan

reference discloses a terminal for composing and presenting MPEG-4 video programs wherein

"...the scene description information is coded into a binary format known as BIFS (Binary

Format for Scene). This BIFS data is packetized and multiplexed at a transmission site, such as a

cable and or satellite television headend, or a server in a computer network, before being sent

over a communication channel to a terminal 100" (Rajan [0042]). The claimed "setting a layout

of images represented by a plurality of image data, which are decided in the decoding steps, in

accordance with the coding formats of the received image and/or sound data" is met by "[t]he

terminal manager 110 passes the user input events to the composition engine 120 for appropriate

handling. For example, a user may enter commands to reposition or change the attributes of

certain objects within the scene graph" (Rajan [0068]) wherein the composition engine maintains

and updates a scene graph of the current objects for display (Rajan [0078]) including a scene

graph for reproduction of objects for display (Rajan [0078]). Therefore, the examiner submits

that it would have been obvious to one of ordinary skill in the art at the time the invention was

made to modify (if necessary) the Suzuki et al. MPEG 4 presentation with the Rajan setter for the

purpose of allowing a user to customize display of programming and user interactivity with such

programming wherein the MPEG-4 communication standard allows a user to interact with video

and audio objects within a scene, whether they are from conventional sources, such as moving

video, or from synthetic (computer generated) sources (Rajan [0004]). The claimed "in

accordance with the coding formats of the received image and/or sound data" is met by the

Suzuki and Rajan combination wherein objects may be encoded in various formats requiring

different decoding means as set forth above.

The claimed "synthesizing the plurality of image data and/or sound data" is met by

"reconstruction circuit 209 includes a synthesizer circuit 252 such that an image signal produced

by the synthesizer circuit 252 is supplied to a display 251 for display (column 16, lines 42-50)

wherein elementary streams comprise encoded audio and video streams (column 13, lines 56-

59). The claimed "decoded in the decoding steps, in accordance with the layout" is met by the

Suzuki and Rajan combination where images are synthesized in accordance with user specified

layouts.

Conclusion

4.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Johnny Ma whose telephone number is (703) 305-8099. The

examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jm

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